**Montana Department of
ENVIRONMENTAL QUALITY****RECEIVED**

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ECEJ-TEP

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

April 1, 2005

Certified Mail

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Linda S. Jacobson
RCRA Project Manager
U.S. Environmental Protection Agency
Region 8
999 18th Street – Suite 300
Denver, Colorado 80202-2466

**RE: ASARCO – Technical Memorandum, Supplemental Ecological Risk Assessment
ASARCO – Interim Measures, Air Sparging Pilot Test Summary Report**

Dear Ms. Jacobson:

The Montana Department of Environmental Quality (Department) received two documents submitted under a cover letter from EPA dated February 23, 2005. The documents were regarding the ASARCO Incorporated facility located in East Helena, Montana. The documents are the following:

1. *Technical Memorandum, Supplemental Ecological Risk Assessment for the East Helena Smelter Site, Montana* dated January 25, 2005; and
2. *Interim Measures, Air Sparging Pilot Test Summary Report, Draft* dated February 2005.

Thank you for providing the Department with the opportunity to review and comment on the documents. The Department's comments on the two documents are listed below.

1. Technical Memorandum, Supplemental Ecological Risk Assessment

Since the Department is not the lead agency regarding corrective action decisions at the site and lacks the in-house risk assessment expertise, the Department has not reviewed this memorandum. The Department will not be providing comments at this time to EPA on the risk assessment.

2. Interim Measures, Air Sparging Pilot Test Summary Report

The summary report covers air sparging pilot testing from April 2000 through December 2002. The draft report is dated February 2005. The report appears to be submitted in response to EPA's February 2, 1999 letter that determined Interim Measures are warranted to address groundwater, the acid plant, and Lower Lake sediments and stockpiled soils.

The Department has reviewed the February 2005 report. ASARCO concludes that air sparging may be effective in reducing arsenic concentrations in groundwater under certain conditions. ASARCO states that arsenic concentrations returned to near pre-test levels after the tests were terminated. The report does not thoroughly address the reasons for the increase, for example, was it remobilization of the arsenic or

the continuing influx of contaminated groundwater. ASARCO states the long-term effectiveness of using air sparging alone or in conjunction with other technologies will be evaluated in the Corrective Measures Study (CMS).

Prior to the ASARCO's submittal of the 2005 summary report, EPA's Carol Rushin stated in a June 7, 2002 letter to ASARCO that air sparging is not an adequate method for preventing off-site migration of arsenic contaminated groundwater. In the letter, EPA stated ASARCO has not been able to demonstrate that the air sparge technology will permanently reduce concentrations of arsenic.

EPA's June 7, 2002 letter states that EPA has determined that a method to hydrologically control the migration of the plume is required at this time. EPA states that EPA will delay implementation of a full-scale groundwater remedy if ASARCO commits to participating financially in EPA's permeable reactive barrier (PRB) research. EPA states that the only new technology that warrants additional research and funding is the PRB technology.

The Department is confused by EPA's June 7, 2002 letter because it appears EPA is discussing final remedies and not remedies for interim measures. Contaminated groundwater is presently migrating off-site and has the potential to affect down-gradient receptors. Interim measure investigations are meant to focus on controlling current off-site contamination that may affect human health or the environment. The Department's understanding is that a technology that will permanently address the reduction of concentrations of arsenic in groundwater would be a function of the final remedy selected from a CMS.

The Department is encouraged that EPA and ASARCO appear to be working towards addressing groundwater contamination. Nonetheless, the Department is concerned that while contaminated groundwater continues to migrate off-site and potentially impacts down-gradient receptors, EPA has not required ASARCO to implement interim measures to control further off-site migration. Six years have passed since EPA informed ASARCO that interim measures were required for groundwater. While it is important that a final remedy for contaminated groundwater be developed, the Department believes EPA should expeditiously require ASARCO to implement interim measures to control off-site migration of contaminated groundwater.

If you have any questions, please do not hesitate to contact me at the phone number or e-mail address below.

Sincerely,



Denise A. Kirkpatrick
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Hazardous Waste Section
Waste and Underground Tank Management Bureau
phone: (406) 444-3983
fax: (406) 444-1374
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cc: Facility file - ASARCO - Corrective Action - file #2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

**999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466**

Ref: 8ENF-T

TELEFAX

FAX PHONE #: (580) 436-8703

TO: Rick Wilkin

AGENCY/FIRM: US EPA Kerr Lab

CITY/STATE: Ada, Oklahoma

NUMBER OF PAGES (including cover sheet): 4

FROM: Linda Jacobson

OFFICE: Technical Enforcement Program
Enforcement, Compliance, and Environmental Justice

FAX PHONE: 303-312-6409

PHONE: 303-312-6503

REMARKS:

Rick,


Please review the attached letter from MDEQ. I am requesting your help in providing a response. I will email you my draft response later today. Thanks.

Take care.

Linda Jacobson



Linda
Jacobson/ENF/R8/USEPA/US
04/06/2005 09:07 AM

To Rick Wilkin/ADA/USEPA/US@EPA
cc
bcc
Subject Need your help....

Rick,

I am going to fax you a letter that I received from MDEQ. I am requesting your help in responding to it. I will develop a draft and email it to you. I'm hoping you can help me craft language regarding the use of air sparging at the site and our appearance of having selected the PRB as a "final remedy".

Take care....and look for a fax and an email.

Linda

*** TX REPORT ***

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